Mountain States ACCUTEST LABORATORIES

04/06/15

Technical Report for

K.P. Kauffman Company, Inc.

Wattenberg Tank

Accutest Job Number: D69171

Sampling Date: 03/30/15

Report to:

K.P. Kauffman Company, Inc.
1675 Broadway Suite 2800
Denver, CO 80202-4628
slaramesa@kpk.com; mhattel@msn.com

ATTN: Susana Lara-Mesa

Total number of pages in report: 28

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

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Sample Summary

K.P. Kauffman Company, Inc.

Job No: D69171

Wattenberg Tank

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
D69171-1	03/30/15	10:30	MH	03/30/15	AQ	Water	TANK-I
D69171-1F	03/30/15	10:30	MH	03/30/15	AQ	Water Filtered	TANK-I

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CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	K.P. Kauffman Company, Inc.	**Job No**	D69171
Site:	Wattenberg Tank	**Report Date**	4/6/2015 12:03:43 PM

On 03/30/2015, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3.4 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69171 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method SW846 6010C

Matrix: AQ **Batch ID:** MP15576

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69098-1FMS, D69098-1FMSD, D69098-1FSDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Potassium are outside control limits for sample MP15576-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP15576-SD1 for Calcium: Serial dilution indicates possible matrix interference.

Wet Chemistry By Method ASTM D287

Matrix: ALL **Batch ID:** GN29316

- The data for ASTM D287 meets quality control requirements.

Wet Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** GP14951

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69022-1MS were used as the QC samples for the HEM Oil and Grease analysis.

Wet Chemistry By Method EPA 300.0/SW846 9056

Matrix: AQ **Batch ID:** GP14954

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69186-3BMS, D69186-3BMSD were used as the QC samples for the Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate analysis.
- D69171-1 for Nitrogen, Nitrate: Elevated detection limit due to matrix interference.
- D69171-1 for Sulfate: Elevated detection limit due to matrix interference.
- D69171-1 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.

Wet Chemistry By Method SM 2540C-2011

Matrix:	AQ	Batch ID:	GN29294

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69024-1DUP were used as the QC samples for the Solids, Total Dissolved analysis.

Wet Chemistry By Method SM 5310B-2011

Matrix:	AQ	Batch ID:	GP14986

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69277-3DUP, D69277-3MS, D69277-3MSD were used as the QC samples for the Total Organic Carbon analysis.

Wet Chemistry By Method SM4500HB+-2011/9040C

Matrix:	AQ	Batch ID:	GN29312

- The following samples were run outside of holding time for method SM4500HB+-2011/9040C: D69171-1 Analysis performed past the required 15 minutes from collection time/holding time.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69171
Account: K.P. Kauffman Company, Inc.
Project: Wattenberg Tank
Collected: 03/30/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D69171-1	TANK-I					
Chloride		10900	500		mg/l	EPA 300.0/SW846 9056
HEM Oil and Grease		625	4.9		mg/l	EPA 1664A
Solids, Total Dissolved		17800	10		mg/l	SM 2540C-2011
Specific Gravity by Hydrometer		1.0114				ASTM D287
Total Organic Carbon		112	20		mg/l	SM 5310B-2011
pH [a]		6.99			su	SM4500HB+-2011/9040C
D69171-1F	TANK-I					
Calcium		216000	20000		ug/l	SW846 6010C
Magnesium		30400	10000		ug/l	SW846 6010C
Potassium		95500	50000		ug/l	SW846 6010C
Sodium		6470000	20000		ug/l	SW846 6010C

(a) Analysis performed past the required 15 minutes from collection time/holding time.

Mountain States ACCUTEST LABORATORIES

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Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	TANK-I		
Lab Sample ID:	D69171-1	Date Sampled:	03/30/15
Matrix:	AQ - Water	Date Received:	03/30/15
		Percent Solids:	n/a
Project:	Wattenberg Tank		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	10900	500	mg/l	1000	03/31/15 11:50	AS	EPA 300.0/SW846 9056
HEM Oil and Grease	625	4.9	mg/l	1	04/01/15	SWT	EPA 1664A
Nitrogen, Nitrate [a]	< 5.0	5.0	mg/l	500	03/31/15 10:24	AS	EPA 300.0/SW846 9056
Nitrogen, Nitrite [a]	< 4.0	4.0	mg/l	1000	03/31/15 11:50	AS	EPA 300.0/SW846 9056
Solids, Total Dissolved	17800	10	mg/l	1	03/31/15	AK	SM 2540C-2011
Specific Gravity by Hydromete	1.0114			1	04/01/15	TJ	ASTM D287
Sulfate [a]	< 250	250	mg/l	500	03/31/15 10:24	AS	EPA 300.0/SW846 9056
Total Organic Carbon	112	20	mg/l	20	04/03/15 14:50	AK	SM 5310B-2011
pH [b]	6.99		su	1	04/01/15 08:20	TB	SM4500HB+-2011/9040C

(a) Elevated detection limit due to matrix interference.
(b) Analysis performed past the required 15 minutes from collection time/holding time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TANK-I		
Lab Sample ID:	D69171-1F	Date Sampled:	03/30/15
Matrix:	AQ - Water Filtered	Date Received:	03/30/15
		Percent Solids:	n/a
Project:	Wattenberg Tank		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	216000	20000	ug/l	5	03/31/15	04/01/15	KV	SW846 6010C [1]	SW846 3010A [2]
Magnesium	30400	10000	ug/l	5	03/31/15	04/01/15	KV	SW846 6010C [1]	SW846 3010A [2]
Potassium	95500	50000	ug/l	5	03/31/15	04/01/15	KV	SW846 6010C [1]	SW846 3010A [2]
Sodium	6470000	20000	ug/l	5	03/31/15	04/01/15	KV	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA5952
(2) Prep QC Batch: MP15576

RL = Reporting Limit

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: D69171

Client / Reporting Information

Company Name: K.P. Kauffman Company, Inc.
Address: 1675 Broadway, Suite 2800
City: Denver State: CO Zip: 80202-4628
Project Contact: Susana Lara-Mesa SLaraMesa@kpk.com
Phone #: 303-825-4822
Samplers's Name: MICHAEL HATTEL (303-665-1400)

Project Information

Project Name: WATTENBERG TANK
Street:
City: Fort Lupton State: CO
Project #:
Fax #:
Client Purchase Order #: 7591

Requested Analysis

Matrix Codes

DW- Drinking Water
GW- Ground Water
WW- Water
SW- Surface Water
SO- Soil
SL-Sludge
OI-Oil
LIQ- Other Liquid
AIR- Air
SOL-Other Solid
WP-Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	MeOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	OIL & GREASE 1664	ANIONS (NITRATE, NITRITE, SULFATE, CHLORIDE)	pH	CATIONS (Ca, K, Mg, NA)	SPECIFIC GRAVITY	TDS	TOC	LAB USE ONLY
	TANK - I		3/30/15	1030	MDH	LIQ	7	X			X					X	X	X	X	X	X	X	01

Turnaround Time (Business days)

[X] Std. 10 Business Days

Approved By:/ Date:

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [x] Hard Copy
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] PDF

Comments / Remarks

PDF copy to Mike Hattel with APEX at mhattel@msn.com

PDF copy to Susan Lara-Mesa with KPK at Slaramesa@kpk.com

Emergency T/A data available VIA Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		3/30/15 1140	1	2		2
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			3	4		4
3	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp.
5			5			3.4

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Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	100	8.6	41		
Antimony	30	3.2	19		
Arsenic	25	5.2	5.6		
Barium	10	1.4	1.4		
Beryllium	10	.8	1.2		
Boron	50	6.7	6.6		
Cadmium	10	.4	.36		
Calcium	400	2.2	41	31.8	<400
Chromium	10	.4	.4		
Cobalt	5.0	.4	.57		
Copper	10	1.2	1.9		
Iron	70	2.2	9.5		
Lead	50	3.6	21		
Lithium	5.0	1.9	2.7		
Magnesium	200	14	19	3.9	<200
Manganese	5.0	.01	.46		
Molybdenum	10	.8	.84		
Nickel	30	.9	.87		
Phosphorus	100	15	20		
Potassium	1000	130	270	10.0	<1000
Selenium	50	8.8	11		
Silicon	50	5.2	5.2		
Silver	30	.4	.6		
Sodium	400	4.9	170	12.1	<400
Strontium	5.0	.01	.12		
Thallium	10	2.9	4		
Tin	50	13	16		
Titanium	10	.15	2.1		
Uranium	50	3.7	5.5		
Vanadium	10	.4	.4		
Zinc	30	.6	3.2		

Associated samples MP15576: D69171-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	RL	IDL	MDL	MB raw	final

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	D69098-1F Original	MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium	anr				
Beryllium					
Boron					
Cadmium					
Calcium	1400	28600	25000	108.8	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	737	27500	25000	107.1	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium	229	26000	25000	103.1	75-125
Selenium					
Silicon					
Silver					
Sodium	245	25900	25000	102.6	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP15576: D69171-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	D69098-1F Original MS	Spikelot ICPALL2	% Rec	QC Limits

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	D69098-1F Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium	anr					
Beryllium						
Boron						
Cadmium						
Calcium	1400	28600	25000	108.8	0.0	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium	737	27500	25000	107.1	0.0	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium	229	26000	25000	103.1	0.0	20
Selenium						
Silicon						
Silver						
Sodium	245	25700	25000	101.8	0.8	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP15576: D69171-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	D69098-1F Original MSD	Spikelot ICPALL2 % Rec	MSD RPD	QC Limit

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium	27500	25000	110.0	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	26900	25000	107.6	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium	25700	25000	102.8	80-120
Selenium				
Silicon				
Silver				
Sodium	25500	25000	102.0	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP15576: D69171-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

Metal	D69098-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium	1400	1590	13.6*(a)	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	737	770	4.5	0-10
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium	229	0.00	100.0(b)	0-10
Selenium				
Silicon				
Silver				
Sodium	245	237	3.6	0-10
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP15576: D69171-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SERIAL DILUTION RESULTS SUMMARY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP15576
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/31/15

	D69098-1F		QC
Metal	Original SDL 1:5	%DIF	Limits

(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

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General Chemistry

QC Data Summaries

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Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP14954/GN29308	0.50	0.0	mg/l	5	5.10	102.0	90-110%
Fluoride	GP14954/GN29308	0.10	0.0	mg/l	1	1.02	102.0	90-110%
HEM Oil and Grease	GP14951/GN29301	5.0	0.0	mg/l	40	36.3	90.8	78-114%
Nitrogen, Nitrate	GP14954/GN29308	0.010	0.0	mg/l	0.1	0.102	102.0	90-110%
Nitrogen, Nitrite	GP14954/GN29308	0.0040	0.0	mg/l	0.05	0.0507	101.4	90-110%
Solids, Total Dissolved	GN29294	10	0.0	mg/l	400	403	100.8	90-110%
Sulfate	GP14954/GN29308	0.50	0.0	mg/l	5	5.16	103.2	90-110%
Total Organic Carbon	GP14986/GN29362	1.0	0.0	mg/l	5	5.03	100.6	90-110%
pH	GN29312			su	8.00	7.98	99.6	99.1-100.9%

Associated Samples:
Batch GN29294: D69171-1
Batch GN29312: D69171-1
Batch GP14951: D69171-1
Batch GP14954: D69171-1
Batch GP14986: D69171-1
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
HEM Oil and Grease	GP14951/GN29301	mg/l	40	35.9	1.1	20%

Associated Samples:
Batch GP14951: D69171-1
(*) Outside of QC limits

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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN29294	D69024-1	mg/l	1830	1850	1.1	0-20%
Total Organic Carbon	GP14986/GN29362	D69277-3	mg/l	1.5	1.5	0.0	0-20%

Associated Samples:
Batch GN29294: D69171-1
Batch GP14986: D69171-1
(*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP14954/GN29308	D69186-3B	mg/l	130	50	184	108.0	80-120%
Fluoride	GP14954/GN29308	D69186-3B	mg/l	0.0	10	10.2	102.0	80-120%
Fluoride	GP14954/GN29308	D69186-3B	mg/l	0.11	10	10.2	102.0	80-120%
HEM Oil and Grease	GP14951/GN29301	D69022-1	mg/l	10.2	40	45.1	87.3	78-114%
Nitrogen, Nitrate	GP14954/GN29308	D69186-3B	mg/l	0.27	1	1.4	113.0	80-120%
Nitrogen, Nitrate	GP14954/GN29308	D69186-3B	mg/l	0.24	1	1.4	113.0	80-120%
Nitrogen, Nitrite	GP14954/GN29308	D69186-3B	mg/l	0.015	0.5	0.49	98.0	80-120%
Nitrogen, Nitrite	GP14954/GN29308	D69186-3B	mg/l	0.0	0.5	0.49	98.0	80-120%
Sulfate	GP14954/GN29308	D69186-3B	mg/l	239	50	293	108.0	80-120%
Total Organic Carbon	GP14986/GN29362	D69277-3	mg/l	1.5	10	11.4	99.0	80-120%

Associated Samples:
Batch GP14951: D69171-1
Batch GP14954: D69171-1
Batch GP14986: D69171-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

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MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D69171
Account: KPKCOD - K.P. Kauffman Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP14954/GN29308	D69186-3B	mg/l	130	50	182	1.1	20%
Fluoride	GP14954/GN29308	D69186-3B	mg/l	0.0	10	9.9	3.0	20%
Fluoride	GP14954/GN29308	D69186-3B	mg/l	0.11	10	9.9	3.0	20%
Nitrogen, Nitrate	GP14954/GN29308	D69186-3B	mg/l	0.24	1	1.3	7.4	20%
Nitrogen, Nitrate	GP14954/GN29308	D69186-3B	mg/l	0.27	1	1.3	7.4	20%
Nitrogen, Nitrite	GP14954/GN29308	D69186-3B	mg/l	0.015	0.5	0.49	0.0	20%
Nitrogen, Nitrite	GP14954/GN29308	D69186-3B	mg/l	0.0	0.5	0.49	0.0	20%
Sulfate	GP14954/GN29308	D69186-3B	mg/l	239	50	290	1.0	20%
Total Organic Carbon	GP14986/GN29362	D69277-3	mg/l	1.5	10	11.3	0.9	20%

Associated Samples:
Batch GP14954: D69171-1
Batch GP14986: D69171-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

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